

Work Order ID 112988 -1

112988

Page 1

Tuesday, February 11, 2014 1:04:14 PM

Item ID: PB67-43001-21

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Upper Blade Support And Cover Assembly

Start Date: 2/11/2014 Start Qty: 12.00

Cust Item ID:

Required Date: 2/28/2014 Req'd Qty: 12.00

Customer:

Reference:

Approvals:

Process Plan: msDate: 14-2-11

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

B67-43001-21

Rev C

100

0.00

100

Small Fab

0.00

Small Fab

Memo

Small Fab

Assemble as per dwg PB67-43001

110

0.00

110

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

Quality Control

120

0.00

120

Identify as per dwg & Stock Location: W/A 003

0.00

Packaging

Memo

Packaging

DAS
24
9-89DAS
9
9-8914
14.03.28

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐	AGAINST DEPARTMENT/PROCESS					
Part No. _____		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐		
NCR No. _____		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Thermoforming ☐	Finishing ☐	Rec./Store/Packaging ☐	Other ☐		
		Large Fab ☐	Composite ☐	Supplier ☐			

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other ☒									
Process ☒									
Supplier ☒									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric to O/S ☐ Cracks ☐ Crushed/Crimped ☐ Cuffs ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Ripples in Bend ☐ Torque Waves in Extrusion ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damaged ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drill Holes ☐ Drawing ☐ Finish ☐ Folio	☐ Grain ☐ Hardware ☐ Inspection Incomplete ☐ Instructions Incomplete/Unclear ☐ Maintenance ☐ Mislabeled ☐ Misread ☐ Offset ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions	☐ Ovalized ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID 112988

112988

Page 2

Tuesday, February 11, 2014 1:04:14 PM

Item ID: PB67-43001-21

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Upper Blade Support And Cover Assembly

Start Date: 2/11/2014 Start Qty: 12.00

12

Cust Item ID:

Required Date: 2/28/2014 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.00

Quality Control

14-03-31

14-03-31

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐	AGAINST DEPARTMENT/PROCESS					
Part No. _____		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐		
NCR No. _____		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Large Fab ☐	Composite ☐	Supplier ☐			

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric to O/S ☐ Cracks ☐ Crushed/Crimped ☐ Cuffs ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Ripples in Bend ☐ Torque Waves in Extrusion ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damaged ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drill Holes ☐ Drawing ☐ Finish ☐ Folio	☐ Grain ☐ Hardware ☐ Inspection Incomplete ☐ Instructions Incomplete/Unclear ☐ Maintenance ☐ Mislabeled ☐ Misread ☐ Offset ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions	☐ Ovalized ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/ Surge	☐ Pressure/Forced ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

Tuesday, February 11, 2014 1:04:13 PM

Page 1

Work Order ID: 112988

Parent Item: PB67-43001-21

Parent Item Name: Upper Blade Support And Cover Assembly

Start Date: 2/11/2014

Required Date: 2/28/2014

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A 08-07-25 new issue DD verified by:ec
dwg EC verified by:DD IPP Rev B 10.09.28 per rev C

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS27039-1-10 SCREW		Purchased	No			100	Each	584.0000	10	120		14-3-27	DAS 24 9-89

Location

Loc Qty

Loc Code

GA	83	
120449	83	
ST305	1	
m126474	1	
st507	500	
m127993	500	

NAS1149D0316J
Washer

Purchased No

40

100

Each 1,524.0000

10 120

14-3-27

DAS
24
9-89

Location

Loc Qty

Loc Code

ST293	1000	
M127993	1000	
ST294	124	
123482	124	
ST510a	400	
M127956	400	

NAS1149D0363J
Washer

Purchased No

40

100

Each 2,405.0000

12 144

14-3-27

DAS
24
9-89

Location

Loc Qty

Loc Code

GA	23	
124392	23	
ST510a	2382	
m126319	1190	
m127813	1192	

48

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐	AGAINST DEPARTMENT/PROCESS					
Part No. _____		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐		
NCR No. _____		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Large Fab ☐	Composite ☐	Supplier ☐			

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General		
☐ Bending	☐ Bend	☐ Grain	☐ Ovalized
☐ Centre Not Concentric to O/S	☐ BOM/Route	☐ Hardware	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damaged	☐ Inspection Incomplete	☐ Part Incorrect
☐ Crushed/Crimped	☐ Burrs	☐ Instructions Incomplete/Unclear	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Maintenance	☐ Part Moved
☐ Heat Treat	☐ Countersink	☐ Mislabeled	☐ Positioned Wrong
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Misread	☐ Power Loss/Surge
☐ Ripples in Bend	☐ Drill Holes	☐ Offset	☐ Pressure/Forced
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Calibration	☐ Temperature/Cure
☐ Turning Sequence	☐ Finish	☐ Out of Sequence	☐ Weld
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions	☐ Wrong Stock Pulled
			☐ Other

Picklist Print

Tuesday, February 11, 2014 1:04:13 PM

Page 2

Work Order ID: 112988

Parent Item: PB67-43001-21

Parent Item Name: Upper Blade Support And Cover Assembly

Start Date: 2/11/2014

Required Date: 2/28/2014

Start Qty: 12.00

Required Qty: 12.00

PB67-43001-173

Manufactured No

100

Each

9.0000

1

12

Cover Plate

Location

Loc Qty

Loc Code

Mezz2

9

99994

9

(4)

DAS
24
9-89

PB67-43001-75

Manufactured No

100

Each

6.0000

1

12

Upper Blade Support Ass'y

Location

Loc Qty

Loc Code

Mezz2

6

106505

1

111279

1

111805

4

DAS
24
9-89

PB67-43001-85

Manufactured No

100

Each

8.0000

1

12

D-Pad Assembly, Long

Location

Loc Qty

Loc Code

Mezz2

8

100025

4

53241

1

90818

3

B 111756 → (4)

Tuesday, February 11, 2014 1:04:13 PM

Shop Packet Print

Page 2

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sigr & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											

FAULT CATEGORY										
Landing Gear			General							
☐ Bending	☐ Centre Not Concentric to O/S	☐ Cracks	☐ Crushed/Crimped	☐ Cuffs	☐ Heat Treat	☐ Inspection Strip in Tube	☐ Ripples in Bend	☐ Torque Waves in Extrusion	☐ Turning Sequence	☐ Wave/Twist in Tube
☐ Bend	☐ BOM/Route	☐ Broken/Damaged	☐ Burrs	☐ Contamination	☐ Countersink	☐ Cut Too Short	☐ Drill Holes	☐ Drawing	☐ Finish	☐ Folio
☐ Grain	☐ Hardware	☐ Inspection Incomplete	☐ Instructions Incomplete/Unclear	☐ Maintenance	☐ Mislabeled	☐ Misread	☐ Offset	☐ Out of Calibration	☐ Out of Sequence	☐ Outside Dimensions
☐ Ovalized	☐ Over/Under tolerance	☐ Part Incorrect	☐ Part Lost/Missing	☐ Part Moved	☐ Positioned Wrong	☐ Power Loss/ Surge				
☐ Pressure/Forced	☐ Temperature/Cure	☐ Weld	☐ Wrong Stock Pulled							
☐ Other										

8

7

6

5

4

3

2

1

D

C

B

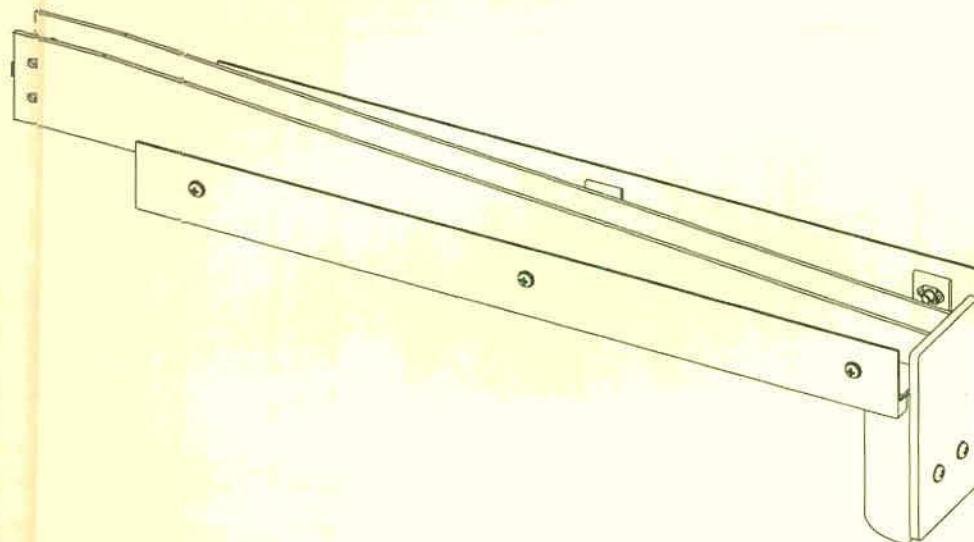
A

D

C

B

A



B67-43001-21 UPPER BLADE SUPPORT AND COVER ASSY

ITEM	QTY -21	P/N	DESCRIPTION
1	X	B67-43001-21	UPPER BLADE SUPPORT AND COVER ASSY
3	1	B67-43001-75	LOWER BLADE SUPPORT ASSY
4	1	B67-43001-85	LONG D-PAD ASSY
5	1	B67-43001-173	COVER PLATE
7	10	MS27039-1-10	SCREW
8	10	NAS1149D0316J	WASHER
9	12	NAS1149D0363J	WASHER

not
112988
14-2-11

RELEASED
2010-09-16
MD

C	REDRAWN PREMIER AVIATION DRAWING IAW DART QSI 018 AND QSI 043. FOR PREVIOUS REVISIONS, REFER TO SHEET 10 OF PREMIER AVIATION DRAWING No. B67-43001. REASON: SEE PAR809-011.		MB	09.07.28
REV.	DESCRIPTION		BY	DATE
DESIGN	RW	DART AEROSPACE LTD		
DRAWN		HAWKESBURY, ONTARIO, CANADA		
CHECKED	<i>JS</i>	DRAWING NO.	B67-43001-21	REV. C
MFG. APPR.	<i>MP</i>	TITLE	UPPER BLADE SUPPORT AND COVER ASSY	SCALE
DE APPR.	N/A			NTS
DATE	09.07.28	COPYRIGHT © 1995 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.		

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

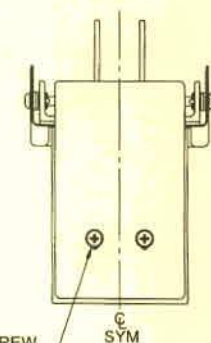
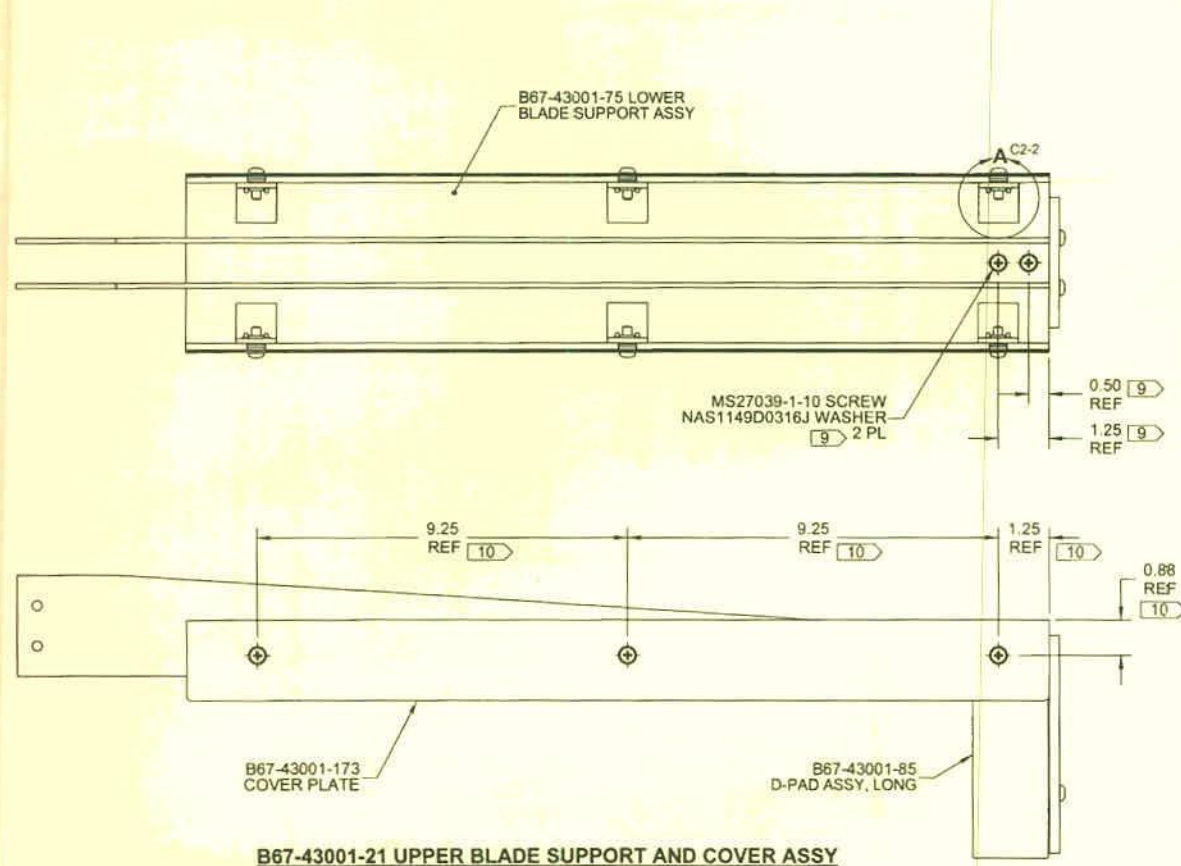
QA Closed: _____ Date: _____

Work Order: _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐	AGAINST DEPARTMENT/PROCESS				
Part No. _____		Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	
NCR No. _____		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	
		Large Fab ☐	Composite ☐	Supplier ☐		

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data ☐									
Equip/Tooling ☐									
Operator ☐									
Material ☐									
Setup ☐									
Other ☐									
Process ☐									
Supplier ☐									
Training ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear	General		
☐ Bending	☐ Bend	☐ Grain	☐ Ovalized
☐ Centre Not Concentric to O/S	☐ BOM/Route	☐ Hardware	☐ Over/Under tolerance
☐ Cracks	☐ Broken/Damaged	☐ Inspection Incomplete	☐ Part Incorrect
☐ Crushed/Crimped	☐ Burrs	☐ Instructions Incomplete/Unclear	☐ Part Lost/Missing
☐ Cuffs	☐ Contamination	☐ Maintenance	☐ Part Moved
☐ Heat Treat	☐ Countersink	☐ Mislabeled	☐ Positioned Wrong
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Misread	☐ Power Loss/Surge
☐ Ripples in Bend	☐ Drill Holes	☐ Offset	☐ Pressure/Forced
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Calibration	☐ Temperature/Cure
☐ Turning Sequence	☐ Finish	☐ Out of Sequence	☐ Weld
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions	☐ Wrong Stock Pulled
			☐ Other



B67-43001-21 UPPER BLADE SUPPORT AND COVER ASSY

- NOTES:**
- 1) MATERIAL: NONE
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: NONE
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 7.49 lbs
 - 8) WELDING: PER DART QSI 004
 - 9) MATCH DRILL $\varnothing 0.250$ THRU B67-43001-173 WITH HOLE PATTERN OF B67-43001-75
 - 10) MATCH DRILL $\varnothing 0.250$ THRU B67-43001-173 WITH HOLES IN ANGLE BRACKETS ON B67-43001-75

MS27039-1-10 SCREW
NAS1149D0316J WASHER
2 PL

DESIGN	RW	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	ASS	DRAWING NO.	REV. C
MFG. APPR.		B67-43001-21	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.	N/A	UPPER BLADE SUPPORT AND COVER ASSY	NTS
DATE	09.07.28	COPYRIGHT © 1995 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR TRANSMITTED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

RELEASED
2010-09-16
D

11298

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General	Other
☐ Bending	☐ Bend	☐ Grain
☐ Centre Not Concentric to O/S	☐ BOM/Route	☐ Hardware
☐ Cracks	☐ Broken/Damaged	☐ Inspection Incomplete
☐ Crushed/Crimped	☐ Burrs	☐ Instructions Incomplete/Unclear
☐ Cuffs	☐ Contamination	☐ Maintenance
☐ Heat Treat	☐ Countersink	☐ Misabeled
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Misread
☐ Ripples in Bend	☐ Drill Holes	☐ Offset
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Calibration
☐ Turning Sequence	☐ Finish	☐ Out of Sequence
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions
		☐ Ovalized
		☐ Over/Under tolerance
		☐ Part Incorrect
		☐ Part Lost/Missing
		☐ Part Moved
		☐ Positioned Wrong
		☐ Power Loss/Surge
		☐ Pressure/Forced
		☐ Temperature/Cure
		☐ Weld
		☐ Wrcng Stock Pulled
		☐ Other